
EXHIBIT B

UNITED STATES DISTRICT COURT
DISTRICT OF GUAM

NANYA TECHNOLOGY CORP. and
NANYA TECHNOLOGY CORP. U.S.A.,

Plaintiffs,

v.

FUJITSU LIMITED and FUJITSU
MICROELECTRONICS AMERICA, INC.,

Defendants.

Case No. CV-06-00025

**DECLARATION OF
KIMBERLY WILSON**

I, Kimberly Wilson, hereby declare as follows:

1. My name is Kimberly Wilson and I am a travel agent with Canyon Creek Travel.

I am over the age of 21 and am competent to make this declaration. All of the statements set forth herein are true and correct and are based on my professional practice and personal knowledge. The flight times and availability of flights are subject to change based upon daily and periodic fluctuations.

2. The flight time between Tokyo, Japan to Tamuning, Guam is approximately three to four hours. The geographic distance between Tokyo, Japan and Tamuning, Guam is approximately 1561 miles. The time difference between Tokyo, Japan and Tamuning, Guam is one hour.

3. Based upon figures published by the Guam Visitors Bureau, in 2006, of the approximately 1.2 million visitors to Guam, approximately 79% came from Japan. The second largest number of visitors to Guam came from Korea with approximately 9%. There are nine cities in Japan with direct flights to Guam. In contrast, there are only three cities in Japan with direct flights to San Francisco, California.

1 3. The flight time between Tokyo, Japan to San Francisco, California is
2 approximately nine to ten hours. The geographic distance between Tokyo, Japan and San
3 Francisco, California is approximately 5131 miles. The time difference between Tokyo, Japan
4 and San Francisco, California is sixteen hours. Thus, the distance between Tokyo, Japan and
5 San Francisco, California is over three times as far as between Tokyo, Japan and Tamuning,
6 Guam and it takes approximately three times as long to get from Tokyo to San Francisco as it
7 takes to get from Tokyo to Guam.
8

9 4. The flight time between Taipei, Taiwan and Tamuning, Guam is approximately
10 three to four hours. The geographic distance between Taipei, Taiwan and Tamuning, Guam is
11 approximately 1721 miles. The time difference between Taipei, Taiwan and Tamuning, Guam is
12 two hours.
13

14 5. The flight time between Taipei, Taiwan and San Francisco, California is
15 approximately eleven to twelve hours. The geographic distance between Taipei, Taiwan and San
16 Francisco, California is approximately 6450 miles. The time difference between Taipei, Taiwan
17 and San Francisco, California is fifteen hours. Thus, the distance between Taipei, Taiwan and
18 San Francisco, California is almost four times as far as between Taipei, Taiwan and Tamuning,
19 Guam and it takes approximately three times as long to get from Taipei to San Francisco as it
20 takes to get from Taipei to Guam.
21

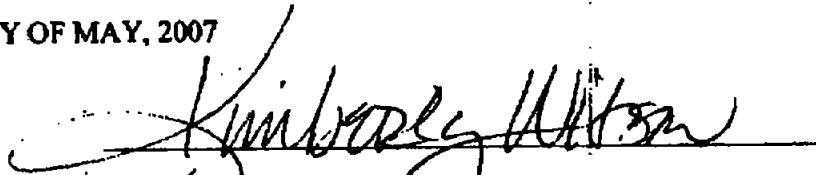
22 6. Additionally, the geographic distance between San Francisco International
23 Airport and the federal courthouse in Oakland is approximately 22 miles and takes
24 approximately 40 minutes to travel. The geographic distance between the Guam airport and the
25 federal courthouse for the District of Guam is approximately less than five miles and takes
26 approximately 10 minutes to travel. Thus, overall, the total travel time from Tokyo to the federal
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1 courthouse in Oakland is over three times longer than it is from Tokyo to the federal courthouse
2 in Guam. Also, the overall, the total travel time from Taipei to the federal courthouse in Oakland
3 is approximately four times longer than it is from Taipei to the federal courthouse in Guam.

4 I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE
5 UNITED STATES OF AMERICA THAT THE FOREGOING IS TRUE AND CORRECT.

6
7 SIGNED ON THE 2 DAY OF MAY, 2007

8 SIGNATURE



9
10 PRINTED NAME

Kimberly Wilson

11
12 TITLE

Agent - Canyon Creek Area

EXHIBIT C

UNITED STATES DISTRICT COURT
DISTRICT OF GUAM

NANYA TECHNOLOGY CORP. and
NANYA TECHNOLOGY CORP. U.S.A.,
Plaintiffs,

v.

FUJITSU LIMITED and FUJITSU
MICROELECTRONICS AMERICA, INC.,
Defendants.

Case No. CV-06-00025

**DECLARATION IN SUPPORT OF
PLAINTIFFS' RESPONSE TO
DEFENDANTS' MOTION TO
IMMEDIATELY TRANSFER FOR
CONVENIENCE**

1. Nanya Technology Corporation ("NTC") is a Taiwanese corporation having its principal place of business in Hwa Ya Technology Park, 669, Fu Hsing 3rd Rd., Kueishan, Taoyuan, Taiwan, Republic of China.

2. Nanya Technology Corporation U.S.A. ("NTC USA") is a wholly owned subsidiary of NTC. NTC USA is NTC's sales office for America. NTC USA's employees do not conduct any relevant research and/or production of the patents-in-suit or accused devices.

3. Several of NTC U.S. Patents are at issue in this matter, including U.S. Patent No. 6,225,187 ("the '187 Patent"); U.S. Patent No. 6,426,271 ("the '271 Patent"); and U.S. Patent No. 6,790,765 ("the '765 Patent").

4. Tse-Yao Huang, Yun-Sen Lai, Yi-Nan Chen, Hsian-Wen Liu, and Hui-Min Mao, inventors of the '187, '271, and '765 Patents all reside in Taiwan. All documents related to the original design and manufacturing of the invention described in the '187, '271, and '765 Patents, including inventor's notes, product specifications, conception, and reduction to practice (to the extent such documents exist), are located in Taiwan.

5. Defendants have accused NTC and NTC's semiconductor memory products of infringing certain Fujitsu Ltd. U.S. Patents. The majority of documents related to the original design and manufacturing of NTC's semiconductor memory products, including engineer's notes

1 and production specifications, are located in Taiwan. The majority of documents related to
2 NTC's sales, offers to sell, use, importation, exportation, and distribution of its semiconductor
3 memory products are located in Taiwan. The majority of engineers and persons with knowledge
4 of NTC's semiconductor memory products reside in Taiwan.
5

6 6. Representatives from NTC and Fujitsu Ltd. participated in license negotiations
7 from 1999 to 2005 with respect to the Fujitsu Ltd. U.S. patents-in-suit, all of which occurred in
8 either Taiwan or Japan. All representatives from NTC who participated in these license
9 negotiations reside in Taiwan.

10 7. NTC is relatively small compared to Fujitsu Ltd. NTC's engineers and other NTC
11 personnel with knowledge of relevant facts have limited available time to travel for depositions,
12 hearings, trial, and other proceedings. A venue closer to Taiwan would permit NTC personnel to
13 more efficiently and easily participate in such proceedings. Air travel from Taiwan to Guam
14 takes about three hours compared to eleven hours to California and does not require crossing the
15 International Date Line. Conducting this lawsuit in Guam compared to California would permit
16 NTC personnel to return to work after participating in such proceedings with substantially less
17 delay and expense.
18

19 I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE
20 UNITED STATES OF AMERICA THAT THE FOREGOING IS TRUE AND CORRECT.
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22 SIGNED ON THE 2nd DAY OF MAY, 2007.

23 SIGNATURE

24 PRINTED NAME

25 TITLE

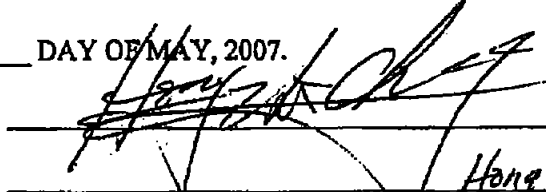

26 Hong-chi Chang
27 Deputy Director, Marketing Div.
28

EXHIBIT D

1 UNITED STATES DISTRICT COURT
2 DISTRICT OF GUAM
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4 NANYA TECHNOLOGY CORP. and
5 NANYA TECHNOLOGY CORP. U.S.A.,

6 *Plaintiffs,*

7 v.

8 FUJITSU LIMITED and FUJITSU
9 MICROELECTRONICS AMERICA, INC.,

10 *Defendants.*

Case No. CV-06-00025

**DECLARATION OF
ASHLEY NICOLE MOORE**

11 I, ASHLEY NICOLE MOORE, DECLARE UNDER PENALTY OF PERJURY THAT THE
12 FOLLOWING IS TRUE AND CORRECT:

13 1. I am registered to practice before the United States Patent and Trademark Office. It is
14 my understanding that the patents-in-suit include the following: U.S. Patent No. 4,384,918, U.S. Patent
15 No. 4,458,336, U.S. Patent No. 4,527,070, U.S. Patent No. 4,539,068, U.S. Patent No. 4,641,166, U.S.
16 Patent No. 4,692,689, U.S. Patent No. 4,801,989, U.S. Patent No. 5,227,996, U.S. Patent No.
17 5,339,273, U.S. Patent No. 5,397,432, U.S. Patent No. 5,688,712, U.S. Patent No. 5,841,731, U.S.
18 Patent No. 6,104,486, U.S. Patent No. 6,292,428, and U.S. Patent No. 6,320,819.

19 2. U.S. Patent No. 4,384,918 identifies Naomichi Abe as the sole inventor and Fujitsu
20 Limited as the assignee. Naomichi Abe is identified as residing in Tokyo, Japan, and Fujitsu Limited
21 is identified as residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No. 4,384,918's
22 front page, which bears this information, is attached hereto as Exhibit A.

23 3. U.S. Patent No. 4,458,336 identifies Yoshihiro Takemae as the sole inventor and Fujitsu
24 Limited as the assignee. Yoshihiro Takemae is identified as residing in Yokohama, Japan, and Fujitsu
25 Limited is identified as residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No.
26
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1 4,458,336's front page, which bears this information, is attached hereto as Exhibit B. Also attached as
2 Exhibit C is a declaration signed by Yoshihiro Takemae confirming under penalty of perjury the
3 inventor's residence in Japan.

4 4. U.S. Patent No. 4,527,070 identifies Shougo Matsui, Yoshimitu Mashima, and Kenichi
5 Kobayashi as the inventors and Fujitsu Limited as the assignee. Shougo Matsui is identified as
6 residing in Sagamihara, Japan, Yoshimitu Mashima is identified as residing in Kawasaki, Japan,
7 Kenichi Kobayashi is identified as residing in Tokyo, Japan, and Fujitsu Limited is identified as
8 residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No. 4,527,070's front page, which
9 bears this information, is attached hereto as Exhibit D. Also attached as Exhibit E is a declaration
10 signed by Shougo Matsui, Yoshimitu Mashima, and Kenichi Kobayashi confirming under penalty of
11 perjury each inventor's residence in Japan.
12

13 5. U.S. Patent No. 4,539,068 identifies Mikio Takagi, Kanetake Takasaki, and Kenji
14 Koyama as the inventors and Fujitsu Limited as the assignee. Mikio Takagi is identified as residing in
15 Kawasaki, Japan, Kanetake Takasaki is identified as residing in Tokyo, Japan, Kenji Koyama is
16 identified as residing in Yokosuka, Japan, and Fujitsu Limited is identified as residing in Kawasaki,
17 Japan. A true and correct copy of U.S. Patent No. 4,539,068's front page, which bears this
18 information, is attached hereto as Exhibit F. Also attached as Exhibit G is a declaration signed by
19 Mikio Takagi, Kanetake Takasaki, and Kenji Koyama confirming under penalty of perjury each
20 inventor's residence in Japan.
21

22 6. U.S. Patent No. 4,641,166 identifies Yoshihiro Takemae, Tomio Nakano, and Kimiaki
23 Sato as the inventors and Fujitsu Limited as the assignee. Yoshihiro Takemae is identified as residing
24 in Tokyo, Japan, Tomio Nakano is identified as residing in Kawasaki, Japan, Kimiaki Sato is identified
25 as residing in Tokyo, Japan, and Fujitsu Limited is identified as residing in Kawasaki, Japan. A true
26 and correct copy of U.S. Patent No. 4,641,166's front page, which bears this information, is attached
27
28

1 hereto as Exhibit H. Also attached as Exhibit I is a declaration signed by Yoshihiro Takemae, Tomio
2 Nakano, and Kimiaki Sato confirming under penalty of perjury each inventor's residence in Japan.

3 7. U.S. Patent No. 4,692,689 identifies Yoshihiro Takemae as the sole inventor and Fujitsu
4 Limited as the assignee. Yoshihiro Takemae is identified as residing in Tokyo, Japan, and Fujitsu
5 Limited is identified as residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No.
6 4,692,689's front page, which bears this information, is attached hereto as Exhibit J.

8 8. U.S. Patent No. 4,801,989 identifies Masao Taguchi as the sole inventor and Fujitsu
9 Limited as the assignee. Masao Taguchi is identified as residing in Sagamihara, Japan, and Fujitsu
10 Limited is identified as residing in Kanagawa, Japan. A true and correct copy of U.S. Patent No.
11 4,801,989's front page, which bears this information, is attached hereto as Exhibit K. Also attached as
12 Exhibit L is a declaration signed by Masao Taguchi confirming under penalty of perjury the inventor's
13 residence in Japan.

15 9. U.S. Patent No. 5,227,996 identifies Toshiya Uchida as the sole inventor and Fujitsu
16 Limited as the assignee. Toshiya Uchida is identified as residing in Kawasaki, Japan, and Fujitsu
17 Limited is identified as residing in Kanagawa, Japan. A true and correct copy of U.S. Patent No.
18 5,227,996's front page, which bears this information, is attached hereto as Exhibit M. Also attached as
19 Exhibit N is a declaration signed by Toshiya Uchida confirming under penalty of perjury the inventor's
20 residence in Japan.

22 10. U.S. Patent No. 5,339,273 identifies Masao Taguchi as the sole inventor and Fujitsu
23 Limited as the assignee. Masao Taguchi is identified as residing in Kawasaki, Japan, and Fujitsu
24 Limited is identified as residing in Kanagawa, Japan. A true and correct copy of U.S. Patent No.
25 5,339,273's front page, which bears this information, is attached hereto as Exhibit O. Also attached as
26 Exhibit P is a declaration signed by Masao Taguchi confirming under penalty of perjury the inventor's
27 residence in Japan.

1 11. U.S. Patent No. 5,397,432 identifies Jun-ichi Konno, Keisuke Shinagawa, Toshiyuki
2 Ishida, Takahiro Ito, Tetsuo Kondo, Fukashi Harada, and Shuzo Fujimura as the inventors and Fujitsu
3 Limited as the assignee. Jun-ichi Konno is identified as residing in Kuwana, Japan, Keisuke
4 Shinagawa is identified as residing in Kawasaki, Japan, Toshiyuki Ishida is identified as residing in
5 Kawasaki, Japan, Takahiro Ito is identified as residing in Kawasaki, Japan, Tetsuo Kondo is identified
6 as residing in Kawasaki, Japan, Fukashi Harada is identified as residing in Kuwana, Japan, Shuzo
7 Fujimura is identified as residing in Tokyo, Japan, and Fujitsu Limited is identified as residing in
8 Kawasaki, Japan. A true and correct copy of U.S. Patent No. 5,397,432's front page, which bears this
9 information, is attached hereto as Exhibit Q. Also attached as Exhibit R is a declaration signed by Jun-
10 ichi Konno confirming under penalty of perjury the inventor's residence in Japan.
11

12 12. U.S. Patent No. 5,688,712 identifies Taiji Ema and Toshimi Ikeda as the inventors and
13 Fujitsu Limited as the assignee. Taiji Ema is identified as residing in Kawasaki, Japan, Toshimi Ikeda
14 is identified as residing in Kawasaki, Japan, and Fujitsu Limited is identified as residing in Kanagawa,
15 Japan. A true and correct copy of U.S. Patent No. 5,688,712's front page, which bears this
16 information, is attached hereto as Exhibit S. Also attached as Exhibit T is a declaration signed by Taiji
17 Ema confirming under penalty of perjury the inventor's residence in Japan.
18

19 13. U.S. Patent No. 5,841,731 identifies Naoharu Shinozaki as the sole inventor and Fujitsu
20 Limited as the assignee. Naoharu Shinozaki is identified as residing in Kawasaki, Japan, and Fujitsu
21 Limited is identified as residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No.
22 5,841,731's front page, which bears this information, is attached hereto as Exhibit U. Also attached as
23 Exhibit V is a declaration signed by Naoharu Shinozaki confirming under penalty of perjury the
24 inventor's residence in Japan.
25

26 14. U.S. Patent No. 6,104,486 identifies Hiroshi Arimoto as the sole inventor and Fujitsu
27 Limited as the assignee. Hiroshi Arimoto is identified as residing in Kawasaki, Japan, and Fujitsu
28

1 Limited is identified as residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No.
2 6,104,486's front page, which bears this information, is attached hereto as Exhibit W.

3 15. U.S. Patent No. 6,292,428 identifies Hiroyoshi Tomita and Tatsuya Kanda as the
4 inventors and Fujitsu Limited as the assignee. Hiroyoshi Tomita is identified as residing in Kawasaki,
5 Japan, Tatsuya Kanda is identified as residing in Kawasaki, Japan, and Fujitsu Limited is identified as
6 residing in Kanagawa, Japan. A true and correct copy of U.S. Patent No. 6,292,428's front page, which
7 bears this information, is attached hereto as Exhibit X. Also attached as Exhibit Y is a declaration
8 signed by Hiroyoshi Tomita and Tatsuya Kanda confirming under penalty of perjury each inventor's
9 residence in Japan.
10

11 16. U.S. Patent No. 6,320,819 identifies Hiroyoshi Tomita and Tatsuya Kanda as the
12 inventors and Fujitsu Limited as the assignee. Hiroyoshi Tomita is identified as residing in Kawasaki,
13 Japan, Tatsuya Kanda is identified as residing in Kawasaki, Japan, and Fujitsu Limited is identified as
14 residing in Kawasaki, Japan. A true and correct copy of U.S. Patent No. 6,320,819's front page, which
15 bears this information, is attached hereto as Exhibit Z. Also attached as Exhibit AA is a declaration
16 signed by Hiroyoshi Tomita and Tatsuya Kanda confirming under penalty of perjury each inventor's
17 residence in Japan.
18

19 17. I personally obtained and confirmed all of the foregoing information from records
20 retrieved from the United States Patent and Trademark Office.
21

22 18. Upon and information and belief, Defendant Fujitsu Limited, is a Japanese corporation,
23 having its principal place of business at Shiodome City Center, 1-5-2 Higashi-Shimbashi, Minato-ku,
24 Tokyo 105-7123, Japan.

25 19. Upon and information and belief, Defendant Fujitsu Microelectronics America, Inc. is a
26 wholly owned subsidiary of Fujitsu Ltd. and is headquartered and has its principal place of business at
27 1250 E. Arques Avenue, M/S 333, Sunnyvale, California 94088-3470.
28

1 I DECLARE UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND
2 CORRECT. SIGNED THIS FIRST DAY OF MAY, 2007.

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ASHLEY NICOLE MOORE

United States Patent [19]

Abe

[11] **4,384,918**[45] **May 24, 1983****[54] METHOD AND APPARATUS FOR DRY ETCHING AND ELECTROSTATIC CHUCKING DEVICE USED THEREIN****[75] Inventor:** Naomichi Abe, Tokyo, Japan**[73] Assignee:** Fujitsu Limited, Kawasaki, Japan**[21] Appl. No.:** 304,903**[22] Filed:** Sep. 23, 1981**[30] Foreign Application Priority Data**

Sep. 30, 1980 [JP]	Japan	55-136255
Oct. 8, 1980 [JP]	Japan	55-141046

[51] Int. Cl. C23C 15/00**[52] U.S. Cl.** 156/643; 156/345; 204/192 B; 204/298; 361/234**[58] Field of Search** 156/345, 643; 204/192 B, 298; 279/1 R, 1 M; 271/18.1, 18.2, 193; 198/691; 361/234; 118/500**[56] References Cited****U.S. PATENT DOCUMENTS**

3,634,740	1/1972	Steuzko	361/234
3,916,270	10/1975	Wachtner et al.	361/234
4,184,188	1/1980	Briglia	361/234
4,282,267	8/1981	Kuyel	204/192 B
4,292,153	9/1981	Kudo et al.	204/298
4,313,783	2/1980	Davies et al.	156/345
4,324,611	4/1982	Vogel et al.	204/298

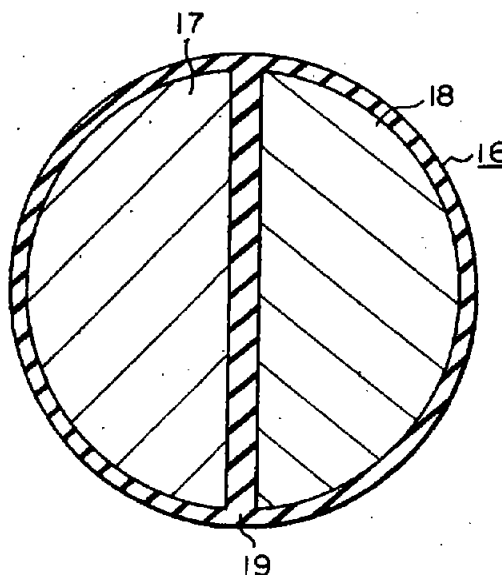
OTHER PUBLICATIONS

"Microetch Ion Beam Milling", VEECO Co. Catalog, pp. 1-29.

"Wafer Coaling . . . Etching", Conference Paper of Precision Machine Society, (1979), pp. 193-194.

Primary Examiner—Jerome W. Massie
Attorney, Agent, or Firm—Stas & Halsey**[57]****ABSTRACT**

An electrostatic chucking device is positioned on a supporting base, the temperature of which is maintained at a predetermined value, the device having an insulator, and a pair of plane electrodes on the insulator, and a material being chucked on the bottom surface of the top surface of the insulator, wherein the sum of the area of portions of the pair of plane electrodes facing the direction of the material being approximately equal to the contact area between the material and the insulator, and wherein a voltage is applied between the plane electrodes from an external power source, thereby effectively electrostatically chucking the material to the supporting base. A method and an apparatus for dry etching of a material having at least a conductive portion therein, the material being chucked by using said electrostatic chucking device mounted on a supporting base, the temperature of which is maintained at a predetermined value, in at least one of a sputter etching apparatus, a reactive sputter etching apparatus, or a plasma etching apparatus, whereby the material is indirectly chucked to the supporting base, the heat conductivity between the material and the supporting base is increased, the temperature of the material is controlled effectively, and the material can be held invertedly in the horizontal plane or vertically.

18 Claims, 10 Drawing Figures**EXHIBIT****A**

Approved for use through 12/31/02. U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Japanese Language Declaration

(日本語宣誓書)

委任状: 私は下記の発明者として、不出題に関する一切の手続きを特許庁長官に対して遂行する手配または代理人として、下記の者を指名いたします。(弁護士、または代理人の氏名及び登録番号を明記のこと)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

特許送付先

And I hereby appoint as principal attorneys: David T. Niklitz, Reg. No. 22,663; Charles M. Marmelstein, Reg. No. 25,895; George E. Oran, Jr., Reg. No. 27,931; Robert B. Murray, Reg. No. 22,900; B. Marcie Enns, Reg. No. 32,131; Douglas R. Goldbach, Reg. No. 33,123; Monica Chia Kins, Reg. No. 36,105; Richard J. Bernas, Reg. No. 39,107; King L. Wong, Reg. No. 37,500; Karen K. Costantino, Reg. No. 35,107; James A. Poulos, III, Reg. No. 31,214; Patrick D. Muir, Reg. No. 37,409; Sharon N. Klesner, Reg. No. 36,335; and Maria Ogas, Reg. No. 44,175; Bradley D. Goldkorn, Reg. No. 43,637; and N. Alexander Neils, Reg. No. 43,489.

直接電報連絡先: (名前及び電話番号)

Please direct all communications to the following address:
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
1050 Connecticut Avenue, N.W., Suite 600
Washington, D.C. 20036-5339
Tel: (202) 857-6000; Fax: (202) 857-6395

唯一または第一発明者名	Full name of sole or first inventor Yoshihiro Takemae		
発明者の署名	日付	Inventor's signature	Date
		<i>Yoshihiro Takemae</i>	Jan. 21, 2002
住所	Residence Kasugai, Japan		
国籍	Citizenship JAPAN		
私書箱	Post Office Address c/o FUJITSU VLSI LIMITED 1844-2, Kozoji-cho 2-chome, Kasugai-shi, Aichi 487-0013 Japan		
第二共同発明者名	Full name of second joint inventor, if any		
第二共同発明者の署名	日付	Second inventor's signature	Date
住所	Residence		
国籍	Citizenship		
私書箱	Post Office Address		

(第三以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)

EXHIBIT

C

United States Patent [19]

Matsui et al.

[11] Patent Number: **4,527,070**[45] Date of Patent: **Jul. 2, 1985**[54] **METHOD AND APPARATUS FOR INSPECTING A PATTERN**

[75] Inventors: Shongo Matsui, Sagami-hara;
Yoshimizu Masahisa, Kawasaki;
Kenichi Kobayashi, Tokyo, all of
Japan

[73] Assignee: Fujitsu Limited, Kawasaki, Japan

[21] Appl. No.: 409,983

[22] Filed: Aug. 20, 1982

[30] **Foreign Application Priority Data**

Aug. 20, 1981 [JP] Japan 56-131276

[51] Int. Cl.³ G01N 21/86

[52] U.S. Cl. 250/560; 356/376

[58] Field of Search 364/468, 488-491;
250/556, 560; 358/101, 106; 356/490, 376

[56] **References Cited****U.S. PATENT DOCUMENTS**

4,318,081	3/1982	Yoshida	364/468
4,390,955	6/1983	Arimura	358/101
4,414,566	11/1983	Peyton et al.	358/101
4,445,137	4/1984	Panofsky	358/101

Primary Examiner—David C. Nelms

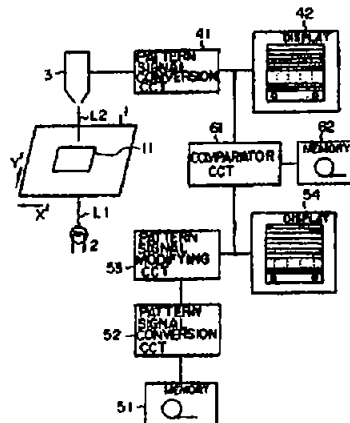
Assistant Examiner—J. Jon Brophy

Attorney, Agent, or Firm—Stans & Halsey

[57] **ABSTRACT**

In a method for inspecting a pattern produced by using pattern data of a predetermined reference pattern, comparison is carried out between the pattern reproduced from the scanning signal of the pattern and the pattern produced from the signal of a modified form of the predetermined reference pattern.

12 Claims, 8 Drawing Figures

**EXHIBIT****D**



Dkt. No. 22.1550/CMK

AJ-3835-115

SUPPLEMENTAL DECLARATION AFTER ALLOWANCE

We, SHOUGO MATSUI, YOSHIMITU MASHIMA and KENICHI KOBAYASHI, residing at 1609-33, Sobudaidanchi, Sagamihara-shi, Kanagawa 229, Japan; Suehirosu, 1743, Shimonumabe, Nakahara-ku, Kawasaki-shi, Kanagawa 211, Japan and 6-34-3, Nagasaki, Toshima-ku, Tokyo 171, Japan, declare that we are citizens of JAPAN and we are the same individuals who on or about August 11, 1982 executed a combined Declaration and Power of Attorney accompanying the subject U.S. Patent Application entitled METHOD AND APPARATUS FOR INSPECTING A PATTERN, which was filed August 20, 1982 and assigned U.S. Serial No. 409,983. We have reviewed and understand the amendments to the subject application, and we declare that we are the original and first inventors of the invention as now described and claimed therein.

We declare that all statements made herein of our own knowledge are true, that all statements made on information and belief are believed to be true, that these statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the subject application or any patent issuing thereon.

Dated April 4, 1985

Shougo Matsui
SHOUGO MATSUI

Dated April 4, 1985

Yoshimitu Mashima
YOSHIMITU MASHIMA

Dated April 4, 1985

Kenichi Kobayashi
KENICHI KOBAYASHI

EXHIBIT

E

United States Patent [19]

Takagi et al.

[11] Patent Number: **4,539,068**[45] Date of Patent: **Sep. 3, 1985**[54] **VAPOR PHASE GROWTH METHOD**[75] Inventors: **Mikio Takagi, Kawasaki; Kanetake Takasaki, Tokyo; Kenji Koyama, Yokosuka, all of Japan**[73] Assignee: **Fujitsu Limited, Kawasaki, Japan**[21] Appl. No.: **412,260**[22] Filed: **Aug. 27, 1982****Related U.S. Application Data**

[63] Continuation of Ser. No. 264,805, May 18, 1981, abandoned, which is a continuation-in-part of Ser. No. 184,363, Sep. 5, 1980, abandoned.

[30] **Foreign Application Priority Data**

Sep. 20, 1979 [JP] Japan 54-121489

[51] Int. Cl.³ C30B 25/02

[52] U.S. Cl. 156/614; 427/93; 427/94; 156/DIG. 64

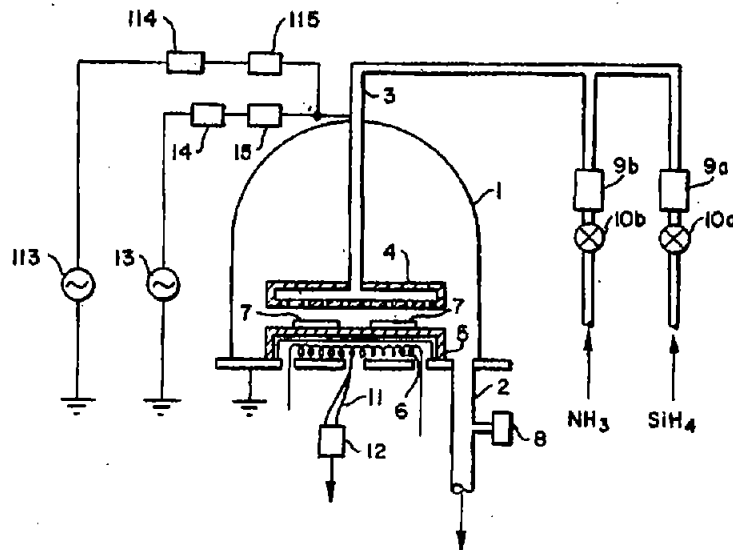
[58] Field of Search 156/614, 613, DIG. 64, 156/DIG. 99; 423/349; 148/175; 427/34, 39, 86, 94, 93, 95, 248.1, 255.2, 87; 204/192 S, 177, 164

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Primary Examiner—Hiram H. Bernstein*Attorney, Agent, or Firm*—Stans & Halsey[57] **ABSTRACT**

A plasma chemical vapor deposition method for forming a film on a substrate which is placed on one of a pair of electrodes oppositely arranged within the reaction chamber of a reactor. A plurality of power generators of different frequencies are applied to the electrodes to excite reactive gases introduced into the reaction chamber, whereby the reactive gases are transformed into a plasma and a desired film is formed on the substrate. Film with a small number of pinholes was formed at a relatively high deposition rate by combinations of power generator frequencies of, for example, 13.56 MHz and 1 MHz, 13.56 MHz and 50 KHz, and 5 MHz and 400 KHz.

3 Claims, 10 Drawing Figures**EXHIBIT****F**



Dkt. No. 21.1071-CIP/C/JCG

SUPPLEMENTAL DECLARATION AFTER ALLOWANCE

We, MIKIO TAKAGI, KANETAKE TAKASAKI and KENJI KOYAMA, residing at 6-20-3, Nagao, Tama-ku, Kawasaki-shi, Kanagawa 213, Japan; 2-26-10-703, Ohmorikita, Ohta-ku, Tokyo 143, Japan; and 3-56, Higashihemi-cho, Yokosuka-shi, Kanagawa 238, Japan, declare that we are citizens of JAPAN and we are the same individuals who on or about May 13, 1981 executed a combined Declaration and Power of Attorney accompanying the subject U.S. Patent Application S.N. 264,805 entitled VAPOR PHASE GROWTH METHOD AND APPARATUS, which was filed on May 18, 1981 which is a continuation-in-part of U.S. Serial No. 184,363 filed September 5, 1980, the subject application being a continuation of U.S. Serial No. 264,805, assigned U.S. Serial No. 412,260 and filed August 27, 1982. We have reviewed and understand the amendments to the above applications, and we declare that we are the original and first inventors of the invention as now described and claimed therein.

We declare that all statements made herein of our own knowledge are true, that all statements made on information and belief are believed to be true, that these statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the subject application or any patent issuing thereon.

Dated June 5, 1985

Mikio Takagi
MIKIO TAKAGI

Dated June 5, 1985

Kanetake Takasaki
KANETAKE TAKASAKI

Dated June 5, 1985

Kenji Koyama
KENJI KOYAMA

EXHIBIT

G

United States Patent [19]

Takamae et al.

[11] Patent Number: 4,641,166
[45] Date of Patent: Feb. 3, 1987

[54] SEMICONDUCTOR MEMORY DEVICE HAVING STACKED CAPACITOR-TYPE MEMORY CELLS

[75] Inventors: Yoshihiro Takamae, Tokyo; Tomio Nakano, Kawasaki; Kimiaki Sato, Tokyo, all of Japan

[73] Assignee: Fujitsu Limited, Kawasaki, Japan

[21] Appl. No.: 560,171

[22] Filed: Dec. 12, 1983

[30] Foreign Application Priority Data

Dec. 20, 1982 [JP] Japan 57-222079

[51] Int. Cl.⁴ H01L 29/78

[52] U.S. Cl. 357/23.6; 357/51;

357/54

[58] Field of Search 357/23.6, 23.11, 51,
357/24, 54

[56] References Cited

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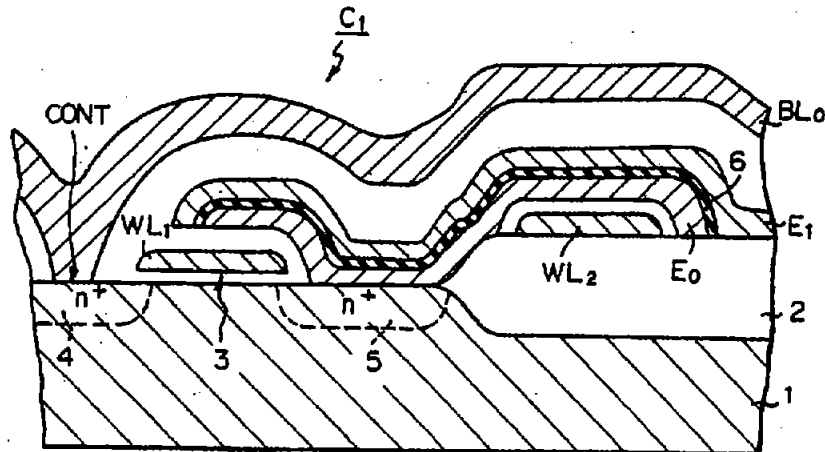
0032279 11/1981 European Pat. Off. .
2493045 10/1980 France .
0021170 2/1980 Japan 357/23 C
55-154762 12/1980 Japan .

Primary Examiner—Martin H. Edlow
Assistant Examiner—Sara W. Crane
Attorney, Agent, or Firm—Staas & Halsey

[57] ABSTRACT

In a semiconductor memory device having stacked capacitor-type memory cells, the capacitor of each memory cell comprises an electrode, an insulating layer, and a counter electrode. The electrode is connected electrically to a source or drain region of a transfer transistor and extends over a part of a word line adjacent to another word line serving a gate electrode of the transfer transistor, at which part no memory cell is formed.

10 Claims, 8 Drawing Figures



EXHIBIT

H

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 46 of 46

Docket No. 22.1786/WDJ

SUPPLEMENTAL DECLARATION AFTER ALLOWANCE

J.N.
 Aug.
 Sep. 1, 1986

We, Yoshihiro Takemae, Tomio Nakano, Kimiaki Sato, residing at 8-13-24-303, Akasaka, Minato-ku, Tokyo 107, Japan; ~~3-1-27-103, Sugagengoku, Tama-ku, Kawasaki-shi, Japan; ~~Kanagawa 214, Japan~~~~ ~~Kanagawa 214, Japan~~ and 4-11-35-204, Minamiazabu, Minato-ku, Tokyo 106, Japan respectively, declare that we are citizens of Japan and that we are the same individuals who, on or about 25 November 1983 executed a combined Declaration and Power of Attorney accompanying a U.S. patent application entitled SEMICONDUCTOR MEMORY DEVICE HAVING STACKED CAPACITOR-TYPE MEMORY CELLS, which was filed 12 December 1983 and assigned Serial No. 560,171. We have read all amendments to the specification and claims of the application, we understand the content of the invention as now described and claimed in the subject application and we declare that we are the original and first inventors thereof and further that this invention was completed before the filing of the subject application.

We acknowledge our duty to disclose information of which we are aware which is material to the examination of the subject application.

EXHIBIT

I

We declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

September 1, 1986
Date

Yoshihiro Takemae
Yoshihiro Takemae

September 1, 1986
Date

Tomoio Nakano
Tomoio Nakano

September 1, 1986
Date

Kimiaki Sato
Kimiaki Sato

United States Patent [19]

Takemae

[11] Patent Number: 4,692,689
[45] Date of Patent: Sep. 8, 1987

- [54] FET VOLTAGE REFERENCE CIRCUIT WITH THRESHOLD VOLTAGE COMPENSATION
[75] Inventor: Yoshihiro Takemae, Tokyo, Japan
[73] Assignee: Fujitsu Limited, Kawasaki, Japan
[21] Appl. No.: 15,529
[22] Filed: Feb. 12, 1987

Related U.S. Application Data

- [63] Continuation of Ser. No. 663,712, Oct. 22, 1984, abandoned.

[30] Foreign Application Priority Data

Nov. 11, 1983 [JP] Japan 58-212083

- [51] Int. Cl.⁴ G05F 3/24
[52] U.S. Cl. 323/313; 307/297;
307/304; 323/314; 323/349; 323/350; 365/226
[58] Field of Search 323/311, 313, 349, 350,
323/314; 307/296 R, 297, 304; 365/226

References Cited

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3138558	4/1983	Fed. Rep. of Germany	323/313
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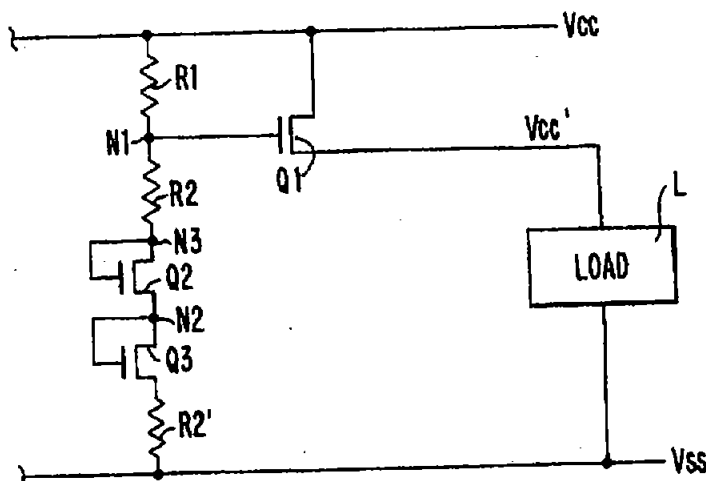
Askin et al., "FET Device Parameters Compensation Circuit", IBM Tech. Disc. Bul., vol. 14, No. 7, pp. 2088, 2089, Dec. 1971.

Primary Examiner—William H. Beha, Jr.
Attorney, Agent, or Firm—Staas & Halsey

[57] ABSTRACT

A voltage converting circuit has an output MIS transistor which gives a low output impedance and outputs an intermediate level of power source voltage. The output level is set with a high accuracy through a voltage dividing ratio determined by an impedance element. This impedance element is connected with a compensating MIS transistor to compensate for variations of the gate threshold voltage caused by the manufacturing process.

10 Claims, 9 Drawing Figures



EXHIBIT

J

United States Patent [19] Taguchi

[11] Patent Number: 4,801,989

[45] Date of Patent: Jan. 31, 1989

[54] DYNAMIC RANDOM ACCESS MEMORY
HAVING TRENCH CAPACITOR WITH
POLYSILICON LINED LOWER
ELECTRODE

59-213460 12/1983 Japan 357/23.6
59-141262 4/1984 Japan .
60-34472 of 1985 Japan .
61-15362 1/1986 Japan .

[75] Inventor: Masao Taguchi, Sagami-hara, Japan

[73] Assignee: Fujitsu Limited, Kanagawa, Japan

[21] Appl. No.: 16,611

[22] Filed: Feb. 19, 1987

[30] Foreign Application Priority Data

Feb. 20, 1986 [JP] Japan 61-036361
Mar. 3, 1986 [JP] Japan 61-045822

[51] Int. Cl.⁴ H01C 29/78

[52] U.S. Cl. 357/23.6; 357/54;
357/55; 357/59; 365/149

[58] Field of Search 357/23.6, 55, 59, 54;
365/149

[56] References Cited

U.S. PATENT DOCUMENTS

4,672,410 6/1987 Miura et al. 357/23.6

FOREIGN PATENT DOCUMENTS

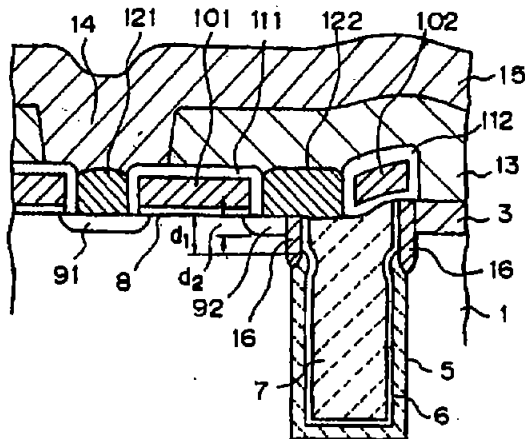
108390 5/1984 European Pat. Off. 357/23.6
0149799 7/1985 European Pat. Off. .
0171131 2/1986 European Pat. Off. .

Primary Examiner—Joseph E. Clawson, Jr.
Attorney, Agent, or Firm—Armstrong, Nikaido,
Marmelstein & Kuboveck

[57] ABSTRACT

In a dynamic random access memory having a trench capacitor, a first conductive layer is formed on all of the inner surface of the trench except for a region adjacent to the opening portion of the trench, a dielectric layer is formed on the first conductive layer exposed in the trench and the surface of the semiconductor substrate, and a second conductive layer of the other conduction type is filled in the trench through the dielectric layer. The first conductive layer, the dielectric layer, and the second conductive layer constitute a storage capacitor. In this dynamic random access memory, a metal insulator semiconductor transistor is formed in the semiconductor substrate, a source or drain region of the transistor of the other conduction type is in contact with the second conductive layer through the dielectric layer, and the second conductive layer is connected with the source or drain region of the other conduction type.

8 Claims, 9 Drawing Sheets



EXHIBIT

K

ARMSTRONG, NIK - MARMELESTEIN & KUBOVCIK ^{FD-3965}

Declaration For Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled DYNAMIC RANDOM ACCESS MEMORY HAVING TRENCH CAPACITOR, the specification of which

(check one) ☒ is attached hereto.

☐ was filed on _____ as
Application Serial No. _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)		Priority Claimed
61-036361 (Pat. Appln.) (Number)	Japan (Country)	20/February/1986 (Day/Month/Year Filed)
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
61-045822 (Pat. Appln.) (Number)	Japan (Country)	3/March/1986 (Day/Month/Year Filed)
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)
		<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
_____ (Application Serial No.)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)

And I hereby appoint as principal attorneys James E. Armstrong, III, Reg. No. 18,368; David T. Nikaido, Reg. No. 22,663; Charles M. Marmelestein, Reg. No. 25,835; Ronald J. Kuboveik, Reg. No. 25,401; George E. Oram, Jr., Reg. No. 27,931; R. E. Jr., Reg. No. 29,728; C. Daniel Cornish, Reg. No. 19,240; Hubert E. Evans, Reg. No. 16,040.

Please direct all communications to the following address:

Armstrong, Nikaido, Marmelestein & Kuboveik
1725 K Street, N.W. Suite 912
Washington, D.C. 20006
(202) 659-2930

EXHIBIT

L

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and those made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Masao TaguchiInventor's signature Masao TaguchiFebruary 12, 1987
DateResidence Sagamihara-shi, Kanagawa, JapanCitizenship JapanesePost Office Address 4-3-4-201, Araisono, Sagamihara-shi, Kanagawa 228, Japan



US005227996A

United States Patent [19]

Uchida

[11] Patent Number: **5,227,996**[45] Date of Patent: **Jul. 13, 1993****[54] SEMICONDUCTOR MEMORY DEVICE
HAVING WORD LINE DRIVER**[75] Inventor: **Toshiya Uchida, Kawasaki, Japan**[73] Assignee: **Fujitsu Limited, Kanagawa, Japan**[21] Appl. No.: **757,154**[22] Filed: **Sep. 10, 1991****[30] Foreign Application Priority Data**

Sep. 14, 1990 [JP] Japan 2-244585

[51] Int. Cl.³ **G11C 5/06**[52] U.S. Cl. **365/72; 365/63;
365/230.06**[58] Field of Search **365/63, 72, 230.06,
365/189.11****[56] References Cited****U.S. PATENT DOCUMENTS**

4,319,342 3/1982 Scheuerlein 365/72 X

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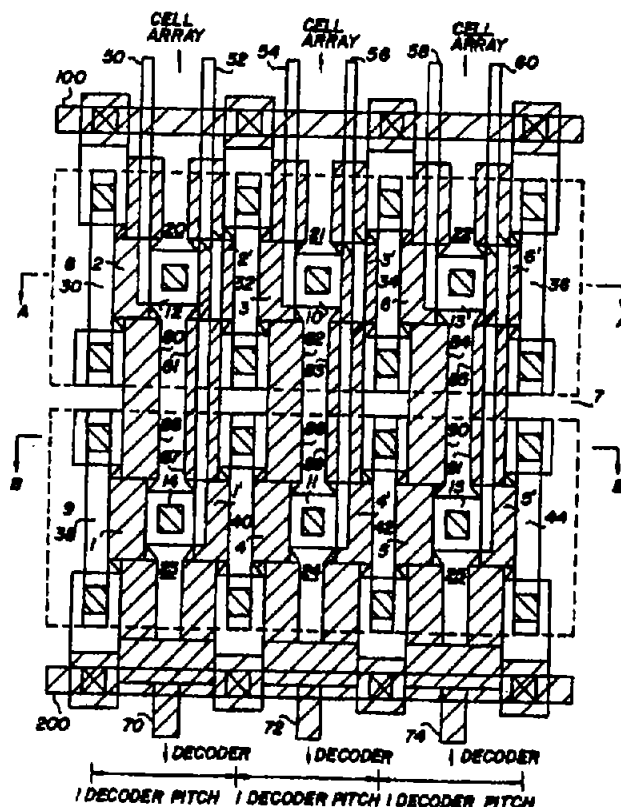
4,694,428 9/1987 Matsumura et al. 365/63 X

4,782,465 11/1988 Uchida 365/72

4,992,981 2/1991 Geneslaser et al. 365/63 X

*Primary Examiner—Eugene R. LaRoche**Assistant Examiner—Do Hyun Yoo
Attorney, Agent, or Firm—Nikaido, Marmelstein,
Murray & Oram***[57] ABSTRACT**

A semiconductor memory device includes first and second word lines which extend in parallel to each other, at least one line activation signal line which extends perpendicularly to the first and second word lines, a device isolation region which extends perpendicularly to the first and second word lines, a first driver for activating the first word line and having a first impurity region provided adjacent to the device isolation region and connected to the word line activation signal line, a first gate electrode and a second impurity region connected to the first word line, a second driver for activating the second word line and comprising a third impurity region provided adjacent to the device isolation region on an opposite side from the first impurity region and connected to the word line activation signal line, a second gate electrode and a fourth impurity region connected to the second word line, and a decoder connected to the first and second gate electrodes.

14 Claims, 8 Drawing Sheets**EXHIBIT****M**

Declaration of U.S. Patent Applicant

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

SEMICONDUCTOR MEMORY DEVICE HAVING WORD LINE DRIVER

the specification of which

(Check one of blocks 1, 2, or 3. See note A on back of this page)

1. ☒ is attached hereto.
2. ☐ was filed on _____ as International PCT Application Serial No. _____ and was amended on _____ (if applicable)
3. ☐ was filed on _____ as U.S. Application Serial No. _____ and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

	2-244585(Pat. Appln.)	Japan	14/September/1990	Priority Claimed
	(Number)	(Country)	(Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(List prior foreign applications. See note B on back of this page)	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

(See Note C on back of this page)

☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(List Prior U.S. Applications)	(Application Serial Number)	(Filing Date)	(Status) (patented, pending, abandoned)
	_____	_____	_____
	_____	_____	_____

And I hereby appoint as principal attorneys James E. Armstrong, III, Reg. No. 18,366; David T. Nikaido, Reg. No. 22,663; Charles M. Marmelstein, Reg. No. 26,895; Ronald J. Kubovcik, Reg. No. 28,401; George E. Oram, Jr., Reg. No. 27,931; Robert H. Murray, Reg. No. 22,980; William F. Westerman, Reg. No. 29,968; Ken-ichi Hattori, Reg. No. 32,881; John R. Pagan, Reg. No. 18,869; Martin S. Postman, Reg. No. 18,570; Le-Nhung McPherson, Reg. No. 31,641; J. Herbert O'Donohue, Reg. No. 31,404; James P. Welch, Reg. No. 17,379; E. Marcia Brown, Reg. No. 32,131; Ronald F. Naughton, Reg. No. 24,818; Albert Dockman, Reg. No. 17,723; Mel R. Quinton, Reg. No. 31,898; Michael G. Gilman, Reg. No. 19,114; Michael J. Perck, Jr., Reg. No. 30,928; Cynthia Lee Poselka, Reg. No. 32,364; James C. Lydon, Reg. No. 30,063; Douglas H. Goldhush, Reg. No. 28,125.

Please direct all communications to the following address: ARMSTRONG, NIKAIIDO, MARMELSTEIN, KUBOVCIK & MURRAY
1725 K Street, N.W., Suite 1000
Washington, D.C. 20006
(202) 659-2930 Fax: (202) 687-0357

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D on back of this page) Full name of sole or first inventor: Toshiya Uchida
Inventor's signature: Toshiya Uchida September 2, 1991
Residence: c/o FUJITSU LIMITED 1015, Kamikodanaka, Nakahara-ku, Kawasaki-shi,
Kanagawa, 211 Japan Japan
Citizenship: _____
Post Office Address: same as residence

EXHIBIT

N



US005339273A

United States Patent [19]

Taguchi

[11] Patent Number: 5,339,273

[43] Date of Patent: Aug. 16, 1994

[54] SEMICONDUCTOR MEMORY DEVICE
HAVING A TESTING FUNCTION AND
METHOD OF TESTING THE SAME

[75] Inventor: Masao Taguchi, Kawasaki, Japan

[73] Assignee: Fujitsu Ltd., Kanagawa, Japan

[21] Appl. No.: 906,406

[22] Filed: Dec. 13, 1991

[30] Foreign Application Priority Data

Dec. 14, 1990 [JP] Japan 2-410668

[51] Int. Cl.⁵ G11C 29/00; G11C 7/00

[52] U.S. Cl. 365/201; 365/149;
365/205

[58] Field of Search 365/149, 200, 201, 184,
365/205; 371/21.1

[56] References Cited

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58-128077 7/1983 Japan .

62-84499 4/1987 Japan .

62-86600 4/1987 Japan .

63-140498 6/1988 Japan .

2-143984 6/1990 Japan .

Primary Examiner—Eugene R. LaRoche

Assistant Examiner—Son Dinh

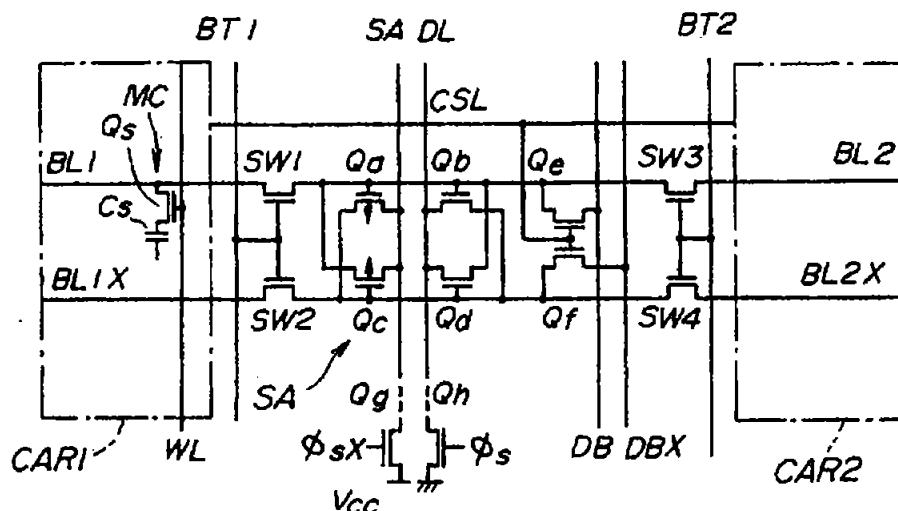
Attorney, Agent, or Firm—Armstrong, Westerman,

Hattori, McLeland & Naughton

[57] ABSTRACT

A semiconductor memory device is provided with a plurality of bit lines, a plurality of word lines, a memory cell array including a plurality of memory cells each coupled to one bit line and one word line, and a varying part for varying a capacitance of at least a selected one of the bit lines in response to a predetermined signal which indicates a test mode in which an operation of the semiconductor memory device is tested.

15 Claims, 7 Drawing Sheets

**EXHIBIT**

0

Declaration For U.S. Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**SEMICONDUCTOR MEMORY DEVICE HAVING A TESTING
FUNCTION AND A METHOD OF TESTING THE SAME**

the specification of which

(Check one
of blocks
1, 2, or 3.
See note A
on back of
this page)

1. ☒ is attached hereto.

2. ☐ was filed on _____ as
International PCT Application Serial No. _____
and was amended on _____
(if applicable)

3. ☐ was filed on _____ as
U.S. Application Serial No. _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

	2-410668 (Pat. Appln.)	Japan	14/December/1990	Priority Claimed
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	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

(List prior
foreign
applications.
See note B
on back of
this page)

☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(List Prior U.S. Applications)	(Application Serial Number)	(Filing Date)	(Status) (patented, pending, abandoned)
	_____	_____	_____
	_____	_____	_____

And I hereby appoint as principal attorneys James B. Armstrong, III, Reg. No. 18,388; David T. Nikaido, Reg. No. 21,663; Charles M. Marmelstein, Reg. No. 26,655; Ronald J. Kubovcik, Reg. No. 26,481; George F. Oran, Jr., Reg. No. 27,931; Robert R. Murray, Reg. No. 27,990; William F. Westerman, Reg. No. 29,998; Ken-ichi Hattori, Reg. No. 32,881; John R. Pynn, Reg. No. 33,088; Martin S. Postman, Reg. No. 33,779; Le-Nhung McLeland, Reg. No. 31,841; J. Herbert O'Toole, Reg. No. 31,304; James P. Welch, Reg. No. 17,370; E. Marcie Emsw, Reg. No. 34,191; Ronald F. Naughton, Reg. No. 31,106; Albert Rockman, Reg. No. 17,182; Mel R. Quinton, Reg. No. 31,888; Michael G. Gilman, Reg. No. 18,114; Michael J. Foycik, Jr., Reg. No. 30,928; Cynthia Lee Foulke, Reg. No. 32,364; James C. Lydon, Reg. No. 30,082; Douglas H. Goldstein, Reg. No. 32,125.

Please direct all communications to the following address: ARMSTRONG, NIKAIKO, MARMELSTEIN,
c/o KUBOVCIK & MURRAY
301 1726 K Street, N.W., Suite 1000
Washington, D.C. 20005
(202) 659-2930 Fax: (202) 887-0857

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D) Full name of sole or first inventor: Masao Taguchi

on back of / Inventor's signature: Masao Taguchi Date: December 2, 1991

this page / Residence: c/o FUJITSU LIMITED 1015, Kamikodanaka, Nakahara-ku, Kawasaki-shi, JEX
Kanagawa, 211 Japan

Citizenship: Japan

Post Office Address: same as residence

EXHIBIT

P



US005397432A

United States Patent [19]

Konno et al.

[11] Patent Number: 5,397,432

[45] Date of Patent: Mar. 14, 1995

[54] METHOD FOR PRODUCING SEMICONDUCTOR INTEGRATED CIRCUITS AND APPARATUS USED IN SUCH METHOD

[75] Inventors: Jun-ichi Konno, Kuwana; Katsuko Shinagawa, Kawasaki; Toshiyuki Ishida, Kawasaki; Takahiro Ito, Kawasaki; Tetsuo Kondo, Kawasaki; Fukuaki Harada, Kuwana; Shunzo Fujimura, Tokyo, all of Japan

[73] Assignee: Fujitsu Limited, Kawasaki, Japan

[21] Appl. No.: 743,383

[22] PCT Filed: Jan. 26, 1991

[86] PCT No.: PCT/JP91/00861

§ 371 Date: Aug. 21, 1991

§ 102(e) Date: Aug. 21, 1991

[87] PCT Pub. No.: WO92/00401

PCT Pub. Date: Jan. 9, 1992

[30] Foreign Application Priority Data

Jun. 27, 1990 [JP] Japan 1-171791

[51] Int. Cl.⁶ H01L 21/08

[52] U.S. Cl. 156/665; 156/643; 156/646; 134/1

[58] Field of Search 156/643, 646, 664, 665, 156/666; 134/1

[56] References Cited

U.S. PATENT DOCUMENTS

4,325,984 4/1982 Galfo et al. 156/665
4,985,113 1/1991 Fujimoto et al. 156/643
5,200,017 4/1993 Kawasaki et al. 156/345

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0416774 3/1991 European Pat. Off. .

61-147530 7/1986 Japan .
1-30225 2/1989 Japan .
1-48421 2/1989 Japan .
1-239933 9/1989 Japan .
2-49425 2/1990 Japan .
2-71519 3/1990 Japan .
2-144525 6/1990 Japan .
2-165656 6/1990 Japan .

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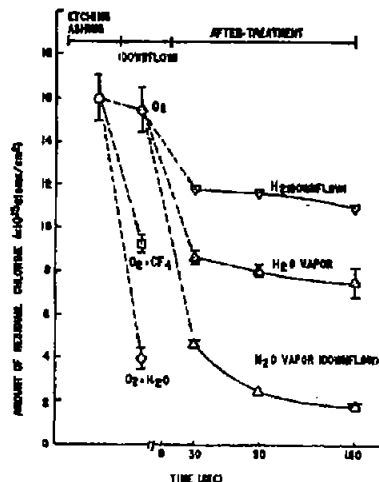
Solid State Technology, vol. 33, No. 2 (Feb. 1990).
Extended Abstracts, vol. 81-2 (1981), pp. 715-716.
Japanese Patent Abstract of JP-A-1 251 742 (Jan. 1989).

Primary Examiner—R. Bruce Breneman
Assistant Examiner—George Goudreau
Attorney, Agent, or Firm—Nikaido, Marmelstein,
Murray & Oram

[57] ABSTRACT

To prevent after-corrosion of wiring or electrodes formed by patterning films of aluminum or an alloy thereof by reactive ion etching (RIE) using an etchant containing chlorine gas or its gaseous compounds, residual chlorine on the surface of the wiring or electrodes is removed by exposing it to a plasma generated in an atmosphere containing water vapor or to neutral active species extracted from the plasma. This treatment is performed either at the same time or after an ashing operation, an operation for removing a resist mask used in the aforesaid RIE by adding water vapor to an atmosphere containing oxygen. To perform the latter separate treatment, an automatic processing system is disclosed in which an after-treatment apparatus for removing residual chlorine is connected, via a second load lock chamber, to an ashing apparatus connected to a RIE apparatus by a load lock chamber which is capable of making a vacuum.

19 Claims, 6 Drawing Sheets



EXHIBIT

Q

Declaration For U.S. Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD FOR PRODUCING SEMICONDUCTOR INTEGRATED CIRCUITS AND APPARATUS USED IN**SUCH METHOD**

the specification of which

(Check one of blocks 1, 2, or 3. See note A on back of this page)

1. ☐ is attached hereto.2. ☒ was filed on June 26, 1991 as
International PCT Application Serial No. PCT/JP91/00861
and was amended on _____
(if applicable)3. ☐ was filed on _____ as
U.S. Application Serial No. _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

(List prior foreign applications. See note B on back of this page)	(Number)	(Country)	(Day/Month/Year Filed)	Priority Claimed
	<u>2-171791</u>	<u>Japan</u>	<u>27/June/1990</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

(See Note C on back of this page)

☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(List Prior U.S. Applications)	(Application Serial Number)	(Filing Date)	(Status) (patented, pending, abandoned)
	_____	_____	_____
	_____	_____	_____

And I hereby appoint as principal attorneys James E. Armstrong, III, Reg. No. 18,866; David T. Nikaido, Reg. No. 22,668; Charles M. Marmelstein, Reg. No. 25,895; Ronald J. Kubovcik, Reg. No. 25,401; George E. Oram, Jr., Reg. No. 27,431; Robert B. Murray, Reg. No. 22,980; William F. Westerman, Reg. No. 29,988; Martin S. Postman, Reg. No. 13,670; Le-Ngung McLeod, Reg. No. 81,641; J. Herbert O'Toole, Reg. No. 81,404; James P. Welch, Reg. No. 17,329; E. Marcie Enas, Reg. No. 32,194; Scott M. Daniels, Reg. No. 32,562; Ronald F. Naughton, Reg. No. 24,616; Albert Tockman, Reg. No. 19,773; James A. Poulos, Reg. No. 31,714; Mel B. Quintos, Reg. No. 31,898; Hubert E. Evans, Reg. No. 18,040; Michael G. Giffman, Reg. No. 19,114.

Please direct all communications to the following address: **ARMSTRONG, NIKAIKO, MARMELSTEIN,**
KUBOVCIK & MURRAY
 1725 K Street, N.W., Suite 1000
 Washington, D.C. 20006
 (202) 659-2980 Fax: (202) 837-0357

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D on back of this page) Full name of sole or first inventor Jun-ichi Konno
 Inventor's signature Junichi Konno July 26, 1991 Date
 Residence AZ house 205, 327-3, Higashikata, Kuwana-shi, Mie, 511 Japan
 Citizenship Japan
 Post Office Address Same as residence above

EXHIBIT**R**



US005688712A

United States Patent [19]

Ema et al.

[11] Patent Number: 5,688,712

[45] Date of Patent: Nov. 18, 1997

[54] **PROCESS FOR PRODUCING A SEMICONDUCTOR DEVICE**

[75] Inventors: Taiji Ema; Toshimi Ikeda, both of Kawasaki, Japan

[73] Assignee: Fujitsu Limited, Kanagawa, Japan

[21] Appl. No.: 643,938

[22] Filed: May 7, 1996

5,077,234 12/1991 Scoopo et al. 437/229
 5,091,761 2/1992 Himiwa et al. .
 5,125,810 6/1992 Goto .
 5,133,645 10/1992 Murata et al. .
 5,196,910 3/1993 Motoki et al. .
 5,237,187 8/1993 Sawase et al. .
 5,245,205 9/1993 Higashimori et al. .
 5,332,687 7/1994 Kuroda 437/52
 5,405,800 4/1995 Ogawa et al. 437/229
 5,488,007 1/1996 Kim et al. 437/48
 5,569,618 10/1996 Matsubara 437/60

Related U.S. Application Data

[62] Division of Ser. No. 376,082, Jan. 20, 1995, Pat. No. 5,550,395, which is a continuation of Ser. No. 46,149, Apr. 15, 1993, abandoned.

[30] **Foreign Application Priority Data**

Apr. 16, 1992 [JP] Japan 4-096726
 Oct. 9, 1992 [JP] Japan 4-271622

[51] Int. Cl.⁶ H01L 21/70

[52] U.S. Cl. 437/60; 437/52; 437/49; 437/195; 437/228; 437/236

[58] Field of Search 437/60, 47, 48, 437/49, 51, 52, 189, 195, 228, 235, 236

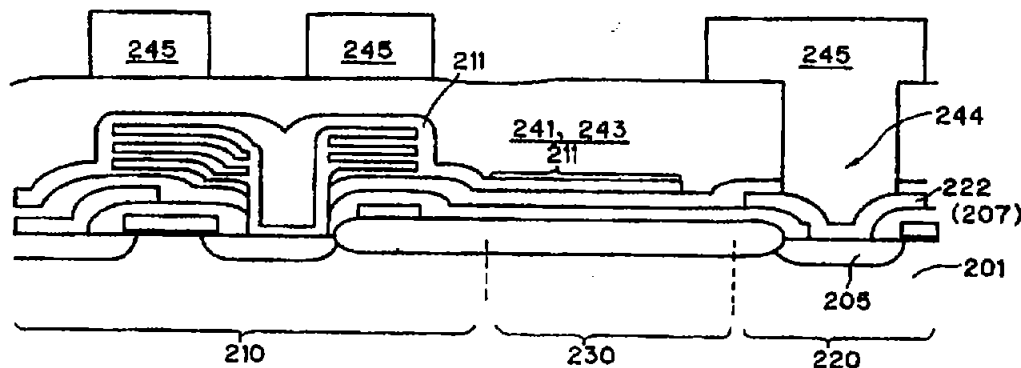
[56] **References Cited****U.S. PATENT DOCUMENTS**

4,505,025 3/1985 Kurosawa et al. 437/67
 4,764,483 8/1988 Fuso et al. 437/229
 4,953,126 8/1990 Ema .

Primary Examiner—Tuan H. Nguyen**Attorney Agent, or Firm**—Nikaido Marmelstein Murray & Oram LLP[57] **ABSTRACT**

A semiconductor device includes a semiconductor substrate having a memory cell area and a circuit area surrounding the memory cell area with a boundary area interposed therebetween. A first conductive layer covers the memory cell area and extends onto the boundary area. A first insulating layer covers the surrounding circuit area and part of the extended portion of the first conductive layer. A second insulating layer covering the first insulating layer and the first conductive layer. A throughhole is formed through the first and second insulating layers. A second conductive layer is electrically connected with another conductive layer via the throughhole and extends from the memory cell area to the surrounding circuit area. The process of producing the semiconductor device is also disclosed.

8 Claims, 18 Drawing Sheets

**EXHIBIT**

S

08/643938

N, M, M & O Docket No. _____

NIKAIDO, MARMELESTEIN, MURRAY & ORAM ⁹⁻²⁹⁰³⁶**Declaration For U.S. Patent Application**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled (Insert Title)

SEMICONDUCTOR DEVICE AND PROCESS OF PRODUCING SAME

the specification of which

(Check one of blocks 1, 2, or 3. See note A on back of this page)

1. ☒ GAs attached hereto.2. ☐ was filed on _____ as
International PCT Application Serial No. _____
and was amended on _____
(if applicable)3. ☐ was filed on _____ as
U.S. Application Serial No. _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

	04-096726(Pat. Appln.)	Japan	16/April/1992	Priority Claimed
(List prior foreign applications. See note B on back of this page)	(Number)	(Country)	(Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	04-271622(Pat. Appln.)	Japan	9/October/1992	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No

(See Note C on back of this page)

☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(List Prior U.S. Applications)	(Application Serial Number)	(Filing Date)	(Status) (patented, pending, abandoned)
	(Application Serial Number)	(Filing Date)	(Status) (patented, pending, abandoned)

And I hereby appoint as principal attorneys David T. Nikaido, Reg. No. 22,663; Charles M. Marmelestein, Reg. No. 23,895; George E. Oram, Jr., Reg. No. 27,931; Robert B. Murray, Reg. No. 23,980; Martin S. Posner, Reg. No. 18,570; El Marle Jones, Reg. No. 32,131; Michael G. Olsman, Reg. No. 19,114; Douglas H. Goldmark, Reg. No. 33,125; Juan Carlos Marquez, Reg. No. 34,072; Robert L. Waddle, Reg. No. 35,795; Kevin C. Brown, Reg. No. 32,402; Monica R. Chin, Reg. No. 36,185.

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Metropolitan Square
655 Fifteenth Street, N.W., Suite 330 - G Street Lobby
Washington, D.C. 20005-5701
(202) 638-5000 Fax: (202) 638-4810

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D on back of this page)

Full name of sole or first inventor Taichi Enma

Inventor's signature Taichi Enma April 7, 1993

Residence Kawasaki-shi, Kanagawa, Japan JPX

Citizenship Japanese

Post Office Address c/o FUJITSU LIMITED, 1015, Kamikodanaka, Nakahara-ku,
Kawasaki-shi, Kanagawa, Japan





US005841731A

United States Patent [19]

Shinozaki

[11] Patent Number: 5,841,731

[45] Date of Patent: Nov. 24, 1998

[54] SEMICONDUCTOR DEVICE HAVING
EXTERNALLY SETTABLE OPERATION
MODE

5,111,433 5/1992 Miyamoto 365/201
5,384,745 1/1995 Koshih et al. 365/230.03
5,430,680 7/1995 Paria 365/222
5,525,331 6/1996 Kim 365/222

[75] Inventor: Naoharu Shinozaki, Kawasaki, Japan

[73] Assignee: Fujitsu Limited, Kawasaki, Japan

[21] Appl. No.: 862,298

[22] Filed: May 22, 1997

[30] Foreign Application Priority Data

Dec. 13, 1996 [JP] Japan 8-334273

[51] Int. Cl.⁶ G11C 8/00[52] U.S. Cl. 365/233; 365/191; 365/201;
365/230.08[58] Field of Search 365/233, 191,
365/201, 230.08

[56] References Cited

U.S. PATENT DOCUMENTS

4,984,216 1/1991 Toda et al. 365/230.08

Primary Examiner—David C. Nelms

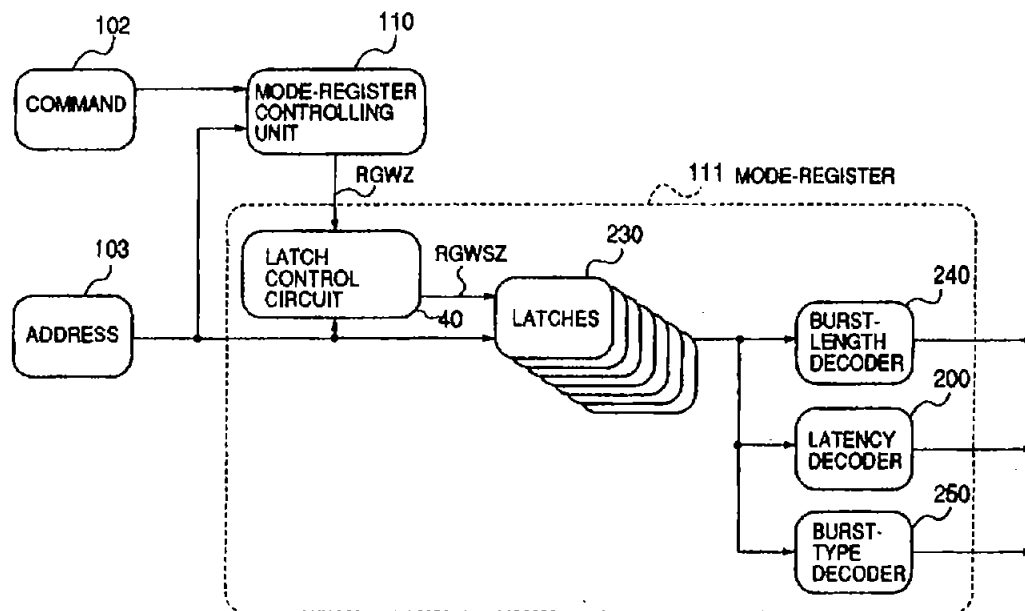
Assistant Examiner—Hien Nguyen

Attorney, Agent, or Firm—Nikaido, Marmelstein, Murray &
Oram LLP

[57] ABSTRACT

A semiconductor device which allows an input signal thereto to select one of N operation modes, and operates in the one of N operation modes includes a selection circuit for selecting an operation mode from the N operation modes when the input signal indicates the operation mode, and for selecting a predetermined operation mode from the N operation modes when the input signal is an undefined signal indicating none of the N operation modes. The semiconductor device further includes an internal circuit operating in an operation mode selected by the selection circuit.

11 Claims, 8 Drawing Sheets



EXHIBIT

U

Declaration For U.S. Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plur names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
(Insert Title) SEMICONDUCTOR DEVICE AVOIDING MALFUNCTION CAUSED BY ILLEGAL INPUT

the specification of which

- (Check one of blocks 1, 2 or 3. See note A on back of this page)
1. ☒ is attached hereto.
 2. ☐ was filed on _____ as
International PCT Application Serial No. _____
and was amended on _____
(if applicable)
 3. ☐ was filed on _____ as
U.S. Application Serial No. _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

(List prior foreign applications. See note B on back of this page)	Pat. Appl. No. <u>8-334273</u>	<u>Japan</u>	<u>13/December/1996</u>	Priority Claimed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No

(See Note C on back of this page)

☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT International application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT International filing date of this application:

(List prior U.S. Applications or PCT International applications designating the U.S.)	(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
	(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

And I hereby appoint as principal attorneys David T. Nikaido, Reg. No. 22,663; Charles M. Marmelstein, Reg. No. 25,825; Geon B. Oram, Jr., Reg. No. 27,931; Robert B. Murray, Reg. No. 29,880; Martin S. Postman, Reg. No. 18,370; B. Marcie Ennis, Reg. No. 32,134; Michael G. Gilman, Reg. No. 19,114; Douglas H. Goldbrink, Reg. No. 33,125; Kevin C. Brown, Reg. No. 32,460; Monica Chin Kitts, Reg. No. 36,105; Sharon N. Klemer, Reg. No. 36,331; and John R. Puzar, Reg. No. 37,327.

Please direct all communications to the following address: NIKAI DO, MARMELSTEIN, MURRAY & ORAM
Metropolitan Square
635 Fifteenth Street, N.W., Suite 330 - G Street Lobby
Washington, D.C. 20004-5701
(202) 638-5000 Fax: (202) 638-4810

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D on back of this page)

Full name of sole or first inventor Nacharu ShinogakiInventor's signature Nacharu Shinogaki

May 16, 1997

Residence Kawasaki-shi, Kanagawa, Japan

Date

Citizenship JapanPost Office Address c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa, 211 Japan

08862298.052297

EXHIBIT

V



US006104486A

United States Patent [19]
Arimoto

[11] **Patent Number:** **6,104,486**

[45] **Date of Patent:** ***Aug. 15, 2000**

[54] **FABRICATION PROCESS OF A SEMICONDUCTOR DEVICE USING ELLIPSOMETRY**

5,349,197 9/1994 Sakamoto et al. 250/492.22
 5,404,019 4/1995 Ohno et al. 250/492.22

FOREIGN PATENT DOCUMENTS

[75] **Inventor:** Hiroshi Arimoto, Kawasaki, Japan

57-132039 8/1982 Japan .

[73] **Assignee:** Fujitsu Limited, Kawasaki, Japan

58-206120 12/1983 Japan .

61-4905 1/1986 Japan .

[*] **Notice:** This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

OTHER PUBLICATIONS

"Ultraviolet-visible ellipsometry for process control during the etching of submicrometer features", N. Blayo et al., AT&T Bell Laboratories, Murray Hill, New Jersey (Sep. 28, 1994); Optical Society of America, vol. 12, No. 3/Mar. 1995, pp. 591-599.

[21] **Appl. No.:** 08/774,272

Primary Examiner—Christopher L. Chin

[22] **Filed:** Dec. 27, 1996

Assistant Examiner—Bao-Thuy L. Nguyen

[30] **Foreign Application Priority Data**

Attorney, Agent, or Firm—Armstrong, Westerman, Hattori, McLeland & Naughton

Dec. 28, 1995 [JP] Japan 7-343924

[57] **ABSTRACT**

[51] **Int. Cl.⁷** G01J 3/00

[52] **U.S. Cl.** 356/300; 356/305; 356/310;
 356/322; 356/337; 356/340; 356/345; 356/351;
 356/364; 356/128; 250/492.1; 250/492.2;
 250/492.22; 250/492.3

[58] **Field of Search** 356/300, 305,
 356/310, 322, 337, 340, 345, 351, 364,
 128; 250/492.1, 492.2, 492.22, 492.3

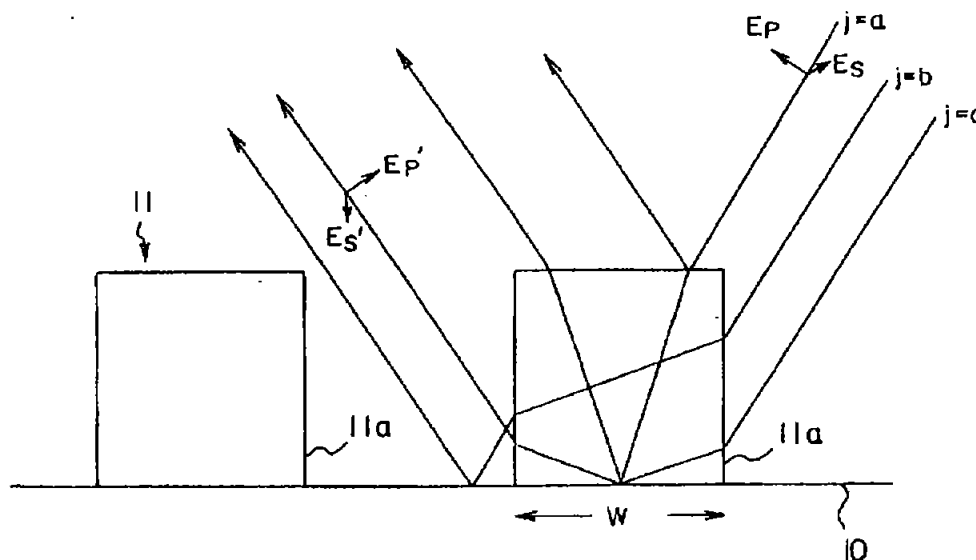
A method of fabricating a semiconductor device includes the steps of illuminating a structure formed on a surface of a substrate by an incident optical beam incident to the structure with a predetermined incident angle with respect to the surface, measuring a polarization state of an exiting optical beam exiting from the structure in response to an illumination of the structure by the incident optical beam, and evaluating a size of the structure in a direction parallel to the surface from the polarization state of the exiting optical beam, and adjusting a parameter of production of a semiconductor device in response to the size.

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,653,924 3/1987 Itosaga et al. 356/369

11 Claims, 24 Drawing Sheets



EXHIBIT

W



US006292428B1

(12) **United States Patent**
Tomita et al.

(10) Patent No.: **US 6,292,428 B1**
(45) Date of Patent: **Sep. 18, 2001**

(54) **SEMICONDUCTOR DEVICE RECONCILING
DIFFERENT TIMING SIGNALS**

(75) Inventors: **Hiroyoshi Tomita; Tatsuya Kanda,**
both of **Kawasaki (JP)**

(73) Assignee: **Fujitsu Limited, Kanagawa (JP)**

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/240,007**

(22) Filed: **Jan. 29, 1999**

(30) **Foreign Application Priority Data**

Feb. 3, 1998 (JP) 10-022257

(51) Int. Cl.⁷ **G11C 8/00**

(52) U.S. Cl. **365/233; 365/230.08; 365/189.05**

(58) Field of Search **365/233, 230.08,**
365/189.05, 240

(56) **References Cited**

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6,064,625 5/2000 Tomita .

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10-269781 10/1998 (JP) .
11-16346 1/1999 (JP) .
12-163954 6/2000 (JP) .
12-40363 8/2000 (JP) .

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dated Dec. 6, 2000, 2 Pages with Japanese Unexamined
Patent Publication No. Hei 7-141870 (Jun. 2, 1995), 1 Page.

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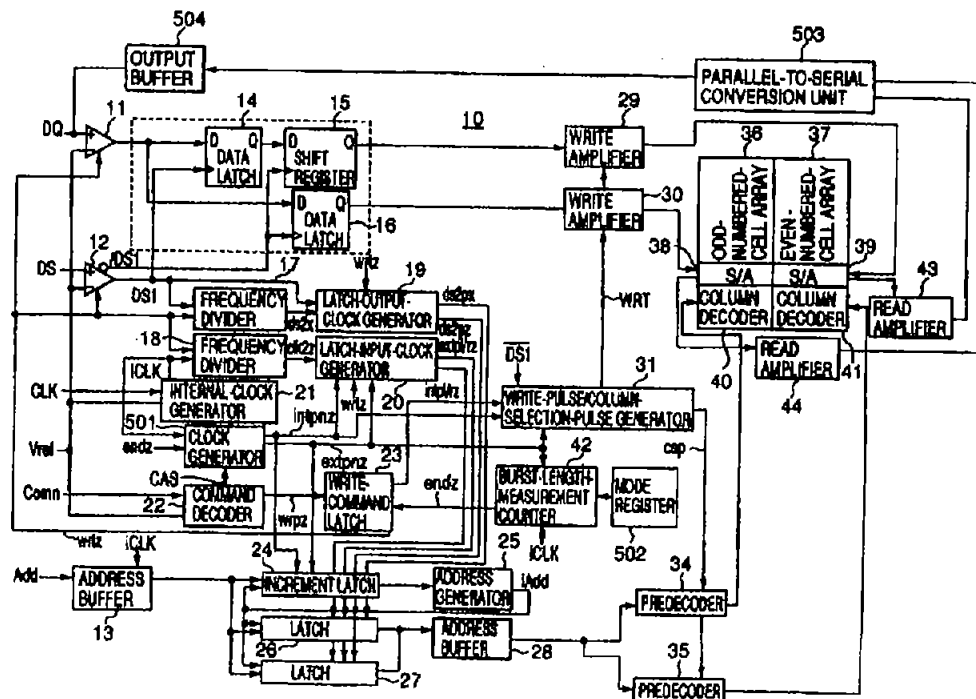
Primary Examiner—Huan Hoang

(74) Attorney, Agent, or Firm—Arent Fox Kintner Plotkin
& Kahn, PLLC

(57) **ABSTRACT**

A semiconductor device which receives addresses in syn-
chronism with a clock signal and receives data in synchro-
nism with a strobe signal includes address-latch circuits, a
first control circuit which selects one of the address-latch
circuits in sequence in response to the clock signal, and
controls the selected one of the address-latch circuits to latch
a corresponding one of the addresses in response to the clock
signal, and a second control circuit which selects one of the
address-latch circuits in sequence in response to the strobe
signal, and controls the selected one of the address-latch
circuits to output a corresponding one of the addresses in
response to the strobe signal.

42 Claims, 25 Drawing Sheets



EXHIBIT

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Page 1 of 2

N, M, M & O Docket No. _____

NIKAIDO, MARMELESTEIN, MURRAY & ORAM LLP

Declaration For U.S. Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled (Insert Title) SEMICONDUCTOR DEVICE RECONCILING DIFFERENT TIMING SIGNALS

the specification of which

(Check one of blocks 1, 2 or 3. See note A on back of this page)

1. ☒ is attached hereto.
2. ☐ was filed on _____ as
International PCT Application Serial No. _____
and was amended on _____
3. ☐ was filed on _____ (If applicable)
U.S. Application Serial No. _____ as
and was amended on _____ (If applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

Pat. Appln. No. 10-022257	Japan	3/February/1998	Priority Claimed
(List prior foreign applications. See note B on back of this page)	(Number)	(Country)	(Day/Month/Year Filed)
	(Number)	(Country)	(Day/Month/Year Filed)
	(Number)	(Country)	(Day/Month/Year Filed)

(See Note C on back of this page) ☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(List prior U.S. Applications)	(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
	(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

And I hereby appoint as principal attorneys David T. Nikaido, Reg. No. 22,663; Charles M. Marmelstein, Reg. No. 25,895; George B. Oram, Jr., Reg. No. 27,931; Robert B. Murray, Reg. No. 22,980; Martin S. Postman, Reg. No. 18,570; E. Marcia Enas, Reg. No. 32,131; Douglas H. Goldhaus, Reg. No. 33,125; Kevin C. Brown, Reg. No. 32,402; Monica Chai Kims, Reg. No. 36,105; Sharon N. Kleiner, Reg. No. 36,335 and Richard J. Berman, Reg. No. 39,107.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D on back of this page)

Full name of sole or first inventor Hiroyoshi Tomita

Inventor's signature Hiroyoshi Tomita

Residence Kawasaki-shi, Kanagawa, Japan

Citizenship Japan

Date Jan. 25, 1999

EXHIBITY

00240007-012990

Page 2 of 2

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 Residence _____ Date
 Citizenship _____
 Post Office Address _____

Full name of fourth joint inventor, if any _____
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 Residence _____ Date
 Citizenship _____
 Post Office Address _____

Full name of fifth joint inventor, if any _____
 Inventor's signature _____
 Residence _____ Date
 Citizenship _____
 Post Office Address _____

Full name of sixth joint inventor, if any _____
 Inventor's signature _____
 Residence _____ Date
 Citizenship _____
 Post Office Address _____

Full name of seventh joint inventor, if any _____
 Inventor's signature _____
 Residence _____ Date
 Citizenship _____
 Post Office Address _____

Full name of eighth joint inventor, if any _____
 Inventor's signature _____
 Residence _____ Date
 Citizenship _____
 Post Office Address _____

Full name of ninth joint inventor, if any _____
 Inventor's signature _____
 Residence _____ Date
 Citizenship _____
 Post Office Address _____

09240007.012999



US006320819B2

(12) **United States Patent**
Tomita et al.

(10) Patent No.: **US 6,320,819 B2**
(45) Date of Patent: **Nov. 20, 2001**

(54) **SEMICONDUCTOR DEVICE RECONCILING
DIFFERENT TIMING SIGNALS**

(75) Inventors: Hiroyoshi Tomita; Tatsuya Kanda,
both of Kawasaki (JP)

(73) Assignee: Fujitsu Limited, Kawasaki (JP)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/733,961

(22) Filed: Dec. 12, 2000

Related U.S. Application Data

(62) Division of application No. 09/240,007, filed on Jan. 29,
1999.

(30) Foreign Application Priority Data

Feb. 3, 1998 (JP) 10-022257

(51) Int. Cl.⁷ G11C 8/00

(52) U.S. Cl. 365/233; 365/189.05; 365/230.08;
365/194

(58) Field of Search 365/233, 189.05,
365/230.08, 194

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6,064,625 5/2000 Tomita .

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dated Dec. 6, 2000, 2 Pages with Japanese Unexamined
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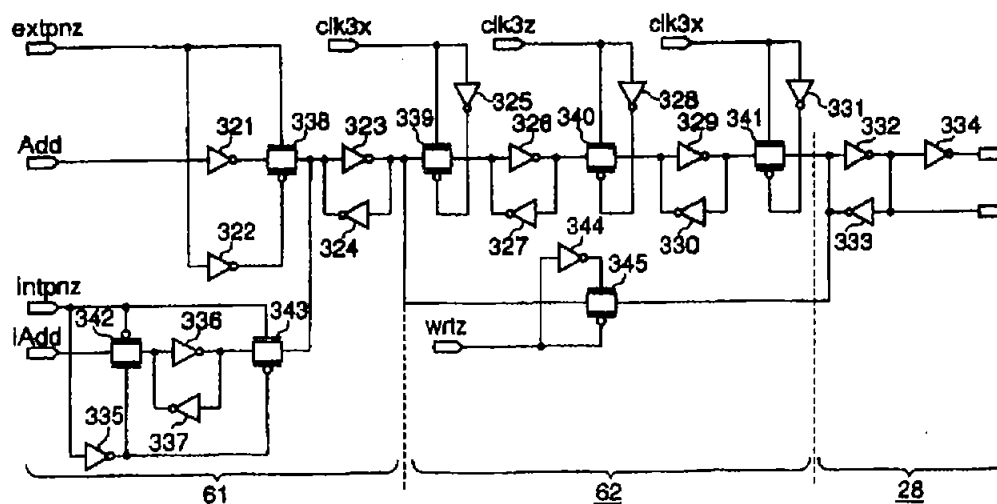
Primary Examiner—Huan Hoang

(74) Attorney, Agent, or Firm—Arcut Fox Kintner Plotkin
& Kahn PLLC

(57) ABSTRACT

A semiconductor device which receives addresses in synchronism with a clock signal and receives data in synchronism with a strobe signal includes address-latch circuits, a first control circuit which selects one of the address-latch circuits in sequence in response to the clock signal, and controls the selected one of the address-latch circuits to latch a corresponding one of the addresses in response to the clock signal, and a second control circuit which selects one of the address-latch circuits in sequence in response to the strobe signal, and controls the selected one of the address-latch circuits to output a corresponding one of the addresses in response to the strobe signal.

6 Claims, 25 Drawing Sheets



EXHIBIT

Z

N, M, M & O Docket No. _____

NIKAIDO, MARMBELSTEIN, MURRAY & ORAM LLP

Declaration For U.S. Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
(Insert Title) SEMICONDUCTOR DEVICE RECONCILING DIFFERENT TIMING SIGNALS

the specification of which

(Check one of boxes 1, 2 or 3. See note A on back of this page)

1. ☒ is attached hereto.
2. ☐ was filed on _____ as International PCT Application Serial No. _____ and was amended on _____ (if applicable)
3. ☐ was filed on _____ as U.S. Application Serial No. _____ and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

(C) I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application for which priority is claimed:

	Pat. Appln. No. 10-022257	Japan	3/February/1998	Priority Claimed
(List prior foreign applications. See note B on back of this page)	(Number)	(Country)	(Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
	(Number)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No

(See Note C on back of this page) ☐ See attached list for additional prior foreign applications

(C) I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(List prior U.S. Applications)

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
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And I hereby appoint as principal attorneys David T. Nikaido, Reg. No. 22,663; Charles M. Marmelstein, Reg. No. 25,893; George B. Oram, Jr., Reg. No. 27,931; Robert B. Murray, Reg. No. 22,980; Martin S. Postman, Reg. No. 18,570; E. Marco Emsw, Reg. No. 32,131; Douglas H. Goldsmith, Reg. No. 33,123; Kevin C. Brown, Reg. No. 32,402; Monica Chis Ehta, Reg. No. 36,105; Sharon N. Klesner, Reg. No. 36,335 and Richard J. Berman, Reg. No. 39,107.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

(See Note D on back of this page)

Full name of sole or first inventor Hirovoshi TomitaInventor's signature Hirovoshi Tomita Jan. 25, 1999Residence Kawasaki-shi, Kanagawa, Japan DateCitizenship JapanPost Office Address c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa, 211-8588 Japan

EXHIBIT

AA

Full name of ninth joint investor, if any _____
Investor's signature _____ Date _____
Residence _____
Citizenship _____
Post Office Address _____

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Attorneys for Plaintiffs Nanya Technology Corp. and
Nanya Technology Corp. U.S.A.

UNITED STATES DISTRICT COURT

DISTRICT OF GUAM

NANYA TECHNOLOGY CORP. and
NANYA TECHNOLOGY CORP. U.S.A.,

Plaintiffs,

v.

FUJITSU LIMITED and FUJITSU
MICROELECTRONICS AMERICA, INC.,

Defendants.

Case No. CV-06-00025

CERTIFICATE OF SERVICE

I, JOSEPH C. RAZZANO, Esq., hereby declare as follows:

1. I am over the age of majority and am competent to testify regarding the matters stated herein.

2. I hereby certify that on May 3, 2007, a true and exact copy of PLAINTIFFS' RESPONSE TO DEFENDANTS' MOTION TO IMMEDIATELY TRANSFER FOR CONVEN-

1 IENCE was served via hand delivery on Defendant Fujitsu, Ltd. through its attorneys of record, Calvo
2 & Clark, at their offices located at 655 South Marine Corp. Drive, Tamuning, Guam 96913.

3 3. I declare under penalty of perjury that the foregoing is true and correct.

4 DATED at Sinajana, Guam on May 3, 2007.

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8 JOSEPH C. RAZZANO, ESQ.
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